

***Optimizing The Utilization Of Fire By Adding A Reflector To The Efficiency Of The Biomass Stove Ub-03-1*** (Optimalisasi Pemanfaatan Api dengan Penambahan Reflektor terhadap Efisiensi Kompor Biomassa UB-03-1)

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***ABSTRACT***

*The biomass stove is one of medium that use to establish the reaction of combustion by using fuel biomass and the heat can be use for cooking. The biomass stove that used by people in the society are still unpretentious and low efficiency. So, in order to increase the efficiency of the biomass stove it still continuing to do a research, whether in engineering construction or the efficiency of the biomass stove by adding a reflector on the biomass stove UB-03-1. The method that used in this research is water boiling test. some of the parameters that use in testing the biomass stove are the start up time, the total operating time, the time of boiling, the sensible heat, the latent heat, the heat of energy input and the thermal efficiency. The result of this research indicate that when the biomass stove added a reflector the efficiency of the biomass stove increased 1,39-6,34%. The biomass stove UB-03-1 has the highest efficiency when added reflector B the efficiency around 16,37% in a cone shape with the bottom diameter is smaller than the top diameter. Moreover, the reflector also used as the concentrator of the fire and accelerate the time of boiling.*

**Keywords:** *Biomass, The Biomass Stove UB-03-1, The Reflector, The Efficiency*